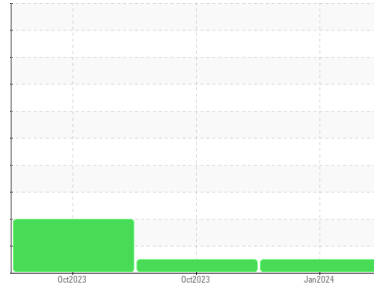




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**914040**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0077785</b>	GFL0077808	GFL0077776
Sample Date	Client Info		<b>25 Jan 2024</b>	24 Oct 2023	12 Oct 2023
Machine Age	hrs	Client Info	<b>1192</b>	635	576
Oil Age	hrs	Client Info	<b>0</b>	638	0
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	0.4
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>20</b>	3	36
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >4	<b>3</b>	<1	1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	1	6
Lead	ppm	ASTM D5185m >40	<b>3</b>	<1	<1
Copper	ppm	ASTM D5185m >330	<b>217</b>	32	263
Tin	ppm	ASTM D5185m >15	<b>2</b>	<1	3
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>8</b>	23	220
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>53</b>	62	123
Manganese	ppm	ASTM D5185m 0	<b>1</b>	<1	4
Magnesium	ppm	ASTM D5185m 1010	<b>917</b>	912	700
Calcium	ppm	ASTM D5185m 1070	<b>1058</b>	1049	1406
Phosphorus	ppm	ASTM D5185m 1150	<b>908</b>	1030	638
Zinc	ppm	ASTM D5185m 1270	<b>1068</b>	1220	832
Sulfur	ppm	ASTM D5185m 2060	<b>2378</b>	3098	2462

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>9</b>	9	▲ 81
Sodium	ppm	ASTM D5185m	<b>3</b>	1	1
Potassium	ppm	ASTM D5185m >20	<b>5</b>	2	7

## INFRA-RED

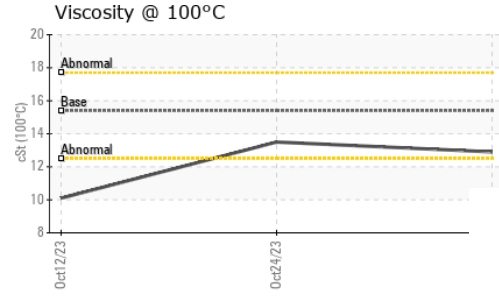
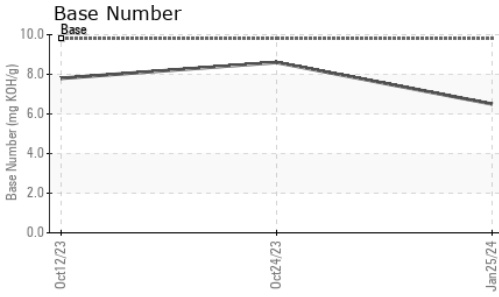
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.1	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.9</b>	4.9	9.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.0</b>	17.6	23.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.1</b>	13.5	21.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.5</b>	8.6	7.8



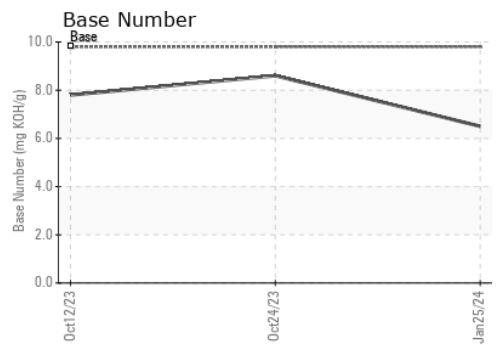
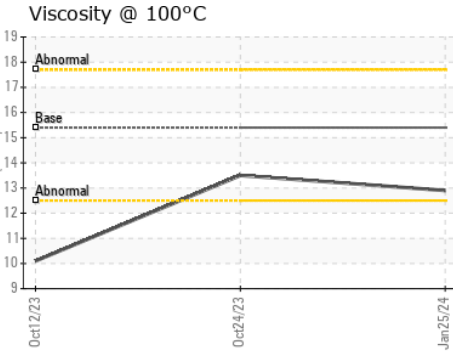
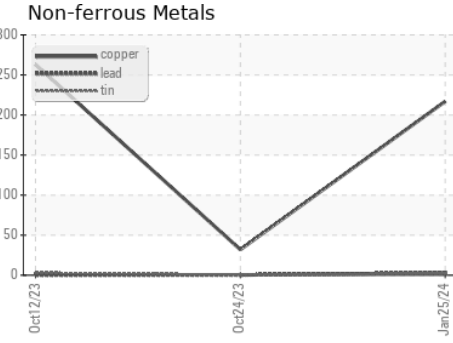
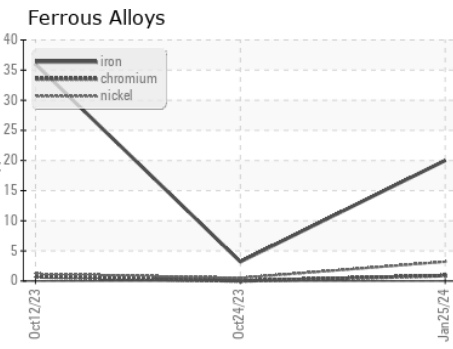
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.9	13.5 ▲ 10.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0077785 **Received** : 31 Jan 2024  
**Lab Number** : 06076335 **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10858426 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 650 - West Point Hauling**  
 7825 Parham Landing Road  
 West Point, VA  
 US 23181  
 Contact: Jason Smith  
 jasonsmith@gflenv.com  
 T:  
 F:

Certificate L2367  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)